Amendments to the Specification:

Please replace paragraph [0027] with the following amended paragraph:

[0027] Air pollution control system 30 removes particles from gaseous effluent 12 in two stages. In a first scrubbing stage, gaseous effluent 12 flows though a first scrubber 100, where the majority of large, potentially abrasive particles are removed from the effluent, resulting in a partially scrubbed effluent as flow 14. It is preferred that the gas in flow 14 is moisture saturated. As shown in FIGS. 1 and 2, and discussed in greater detail subsequently, a first liquid 13 and a second liquid 15 are introduced into scrubber 100, take up the scrubbed particles, and are removed as a liquid 17 through a drain 25. In a second stage, second scrubber 20 receives flow 14 and removes the majority of particles of gaseous effluent 12 that are not removed in first scrubber 100. More specifically, scrubber 20 includes provisions for injecting water at locations 27, such as injection for various sprays or sheets of liquid to cool and/or scrub gases, and for removing water and scrubbed particles at locations 28. Scrubber 20 is configured such that a substantial portion of the liquid injected into locations 27 is removed at locations 28 and does not mix with liquid 17. The gaseous effluent 12, processed to substantially scrub particles in scrubbers 100 and 20, exits air pollution control system 30 as a gas flow 16. The particles scrubbed in scrubber 100 exit system 30 in liquid 17, and the particles scrubbed in scrubber 20 leave system 30 at ~~locations 27~~ drain 25.

Please replace paragraph [0031] with the following amended paragraph:

[0031] Scrubber 100 will now be described in greater detail with reference to FIG. 1 and FIG. 2, which is a partial section side view of the scrubber. Scrubber 100 is connected to incinerator 10 through a duct 115. Scrubber 100 has an inlet section 110, venturi 120, and outlet section 130 with internal surfaces 112, 122, and 132. Inlet section 110 has a connector 111 adapted for receiving duct 115, a first fluid inlet line 150 with a valve 151 to control the flow of a first liquid 13, and a second liquid inlet line 160 with a valve 161 to control the flow of a second liquid or quencher water 15. Venturi 120 includes a contraction section 121, a throat 123, and an expansion section 125. One or more nozzles 170 are connected to line 160 to receive liquid 15

and produce spray 15', either within inlet section 110 or venturi 120. The downstream side of scrubber 110 includes a cylindrical portion 131 having a bottom 133. Outlet 140 is located above bottom 133, resulting in a recess[[es]] 135 [[at]] within outlet section 130.

Please replace paragraph [0033] with the following amended paragraph:

[0033] Scrubber 100 also receives liquid 15 under pressure and directs the liquid to one or more nozzles 170, resulting in a spray 15' that flows through venturi 120. The preferred location of the nozzles 170 are upstream of venturi 120 configured to direct spray 15' across inlet section 110. Alternatively, the nozzles can be placed in venturi 120 and directed with [[in]] <u>an</u> initial direction towards inlet portion 110 to increase the relative velocity of the gas and liquid. In either case, it is important that spray 15' scrubs gaseous effluent 12 by contacting the effluent within venturi 120.

Please replace paragraph [0034] with the following amended paragraph:

[0034] Many nozzles 170 for generating spray 15' are known in the art. As discussed subsequently, it is important that nozzles 170 generate a spray 15' of droplets having a size useful for capturing the abrasive particles, and that the droplets be injected into the flow with a sufficient velocity difference between the droplets and the particles. The generation of droplets within specified size ranges, and their velocity, is well known in the art and is controllable, for example by the pressure of the liquid supplied to the nozzles, co-flowing gas (if used) and the shape of the discharge of the nozzle. As one example of droplet sizes useful for a low-energy venturi, size ranges of approximately 200 to 750 microns are effective, as described herein. Such droplets can be generated, for example, using BETE TF type nozzle at moderate liquid pressures. (BETE Fog Nozzle, Inc., Greenfield, Mass. 01301). By operating the nozzle at a pressure of 80 psig, the droplets <u>that</u> leave nozzle 170 cool the gaseous effluent 12 to near the moisture saturation and collect the larger entrained particles, that is those larger than about 2 micrometers.

Please replace paragraph [0042] with the following amended paragraph:

[0042] The calculated collection efficiency of 2 micrometer particles, in weight percent, as a function of liquid droplet diameter, in microns, is shown in FIG. 6 for a constant L/G of approximately 3.8 gal/1000 acf. The graph of FIG. 6 has curves showing the collection efficiencies for two different Δv's: a curve **601** for a Δv of 65 feet per second, which corresponds to a ΔP of approximately 2" H_2O, and a curve **603** for a Δv of 100 feet per second, which corresponds to a ΔP of approximately 5" H_2O. Curves **601** and **603** both have a peak collection efficiency that is <u>relatively</u> constant for droplet sizes of from approximately 300 micrometers to approximately 750 micrometers, with the collection efficiency increasing with increasing Δv. Comparing the results of FIGS. 5 and 6 also shows that collection efficiency increases with L/G. <u>Curve **603**, corresponding to approximately 5" H_2O (as described above), shows nearly 100% collection efficiency up to a droplet size of approximately 500 micrometers, and with a reduction in efficiency at droplets sizes above approximately 500 micrometers.</u>